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Attorney Docket No. 25771-X

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

ZILBERMAN, Uri

Group Art Unit: 3732

Serial No. 10/685,803

Examiner: BUMGARNER, Melba N.

Filed: October 16, 2003

For: DENTAL CROWNS

TRANSMITTAL LETTER

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Submitted herewith for filing in the U.S. Patent and Trademark Office is the following:

- (1) Transmittal Letter;
- (2) Submission of International Preliminary Examination Report;
- (3) International Preliminary Examination Report.

Respectfully submitted,

NATH & ASSOCIATES PLLC

By: 

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Date: January 31, 2005
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SUBMISSION OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

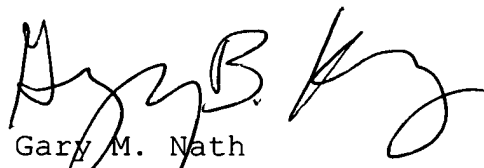
Sir:

In order to supplement the documents filed with the national phase filing of the captioned application on October 16, 2003, applicant now submits the following document:

- (1) International Preliminary Examination Report.

Respectfully submitted

NATH & ASSOCIATES PLLC


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Registration No. 26,965
Gregory B. Kang
Registration No. 45,273
Customer No. 20529

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PATENT COOPERATION TREATY

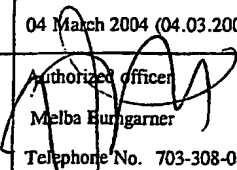
PCT

REC'D 29 MAR 2004

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

WIPO PCT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 6727/2M255WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/IL02/00310	International filing date (day/month/year) 16 April 2002 (16.04.2002)	Priority date (day/month/year) 17 April 2001 (17.04.2001)
International Patent Classification (IPC) or national classification and IPC IPC(7): A61 C 5/08 and US Cl.: 433/218		
Applicant ZILBERMAN, URI		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>3</u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p style="text-align: right;">EPO - DG 1</p> <p>These annexes consist of a total of <u> </u> sheets.</p>		
<p>3. This report contains indications relating to the following items: 03.05.2004</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of report with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p> </div> <div style="width: 35%; text-align: center;"> <p>(36)</p> </div> </div>		
Date of submission of the demand 13 November 2002 (13.11.2002)	Date of completion of this report 04 March 2004 (04.03.2004)	
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230	<div style="text-align: center;">  Authorized officer Melba Bunnigarn Telephone No. 703-308-0858 </div>	

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/IL02/0310

I. Basis of the report

1. With regard to the elements of the international application:*

- ☒ the international application as originally filed.
- ☒ the description:
 pages 1-3 _____ as originally filed
 pages NONE _____, filed with the demand
 pages NONE _____, filed with the letter of _____
- ☒ the claims:
 pages 4 and 5 _____, as originally filed
 pages NONE _____, as amended (together with any statement) under Article 19
 pages NONE _____, filed with the demand
 pages NONE _____, filed with the letter of _____
- ☒ the drawings:
 pages 1-4 _____, as originally filed
 pages NONE _____, filed with the demand
 pages NONE _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages NONE _____, as originally filed
 pages NONE _____, filed with the demand
 pages NONE _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages NONE
- ☐ the claims, Nos. NONE
- ☐ the drawings, sheets/fig NONE

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/IL02/00310**V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. STATEMENT**

Novelty (N)	Claims 4-13	YES
	Claims 1-3	NO
Inventive Step (IS)	Claims 4,5,12 and 13	YES
	Claims 1-3 and 6-11	NO
Industrial Applicability (IA)	Claims 1-13	YES
	Claims NONE	NO

2. CITATIONS AND EXPLANATIONS

Claim 1 lacks novelty under PCT Article 33(2) as being anticipated by Karmaker et al. Karmaker et al. disclose an injection molded dental crown formed of an acetal homopolymer resin (col. 2 line 1).

Claims 1-3 lack novelty under PCT Article 33(2) as being anticipated by Braiman. Braiman discloses a dental crown formed of an acetal homopolymer resin (col. 1 line 40). Braiman shows depending side surfaces and at least one of the surfaces showing an undercut (a cut made to the under part to remove material) as seen in figure 3.

Claim 6 lack an inventive step under PCT Article 33(3) as being obvious over Kogure in view of Karmaker et al. Kogure discloses a method for mass producing dental prosthesis comprising providing a multi-element mold and employing the mold to injection mold prosthesis from resin; however, Kogure does not show resin of acetal homopolymer. Karmaker et al teach employing acetal homopolymer resin. It would have been obvious to one of ordinary skill in the art to employ the material Karmaker in the method to have a material that is easily injection molded and cured into shapes of mold contours.

Claim 7 lacks an inventive step under PCT Article 33(3) as being obvious over the prior art as applied in the immediately preceding paragraph and further in view of Matsumoto et al. The modified method of Kogure and Karmaker et al shows the limitations as described above; however, they do not show the mold including an ejector. Matsumoto et al. teach a method providing a multi-element mold including an ejector. It would have been obvious to further modify the method to include an ejector to aid in removing the resin article from the mold.

Claims 8-11 lack an inventive step under PCT Article 33(3) as being obvious over the prior art as applied in the preceding paragraph and further in view of Braiman. The modified method of Kogure and Karmaker et al. shows the limitations as described above; however, they do not show forming the dental crown with depending side surfaces. It would have been obvious to further modify the method to include the surfaces of Braiman to attach the crown to the prosthesis support in the patient's mouth as taught by Braiman. Claims 4,5,12, and 13 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest injection molded dental crown formed of an acetal homopolymer resin having depending side surfaces that are flexible.

Claims 1-13 meet the criteria set out in PCT Article 33(4), and thus meet industrial applicability because the subject matter claimed can be made or used in industry.

NEW CITATIONS